

The rejection of Claims 1, 6-21, 23, 30, 37-39, 54, and 56 under 35 U.S.C. § 112, second paragraph, is respectfully traversed.

The Office Action indicates that the terms “deal” and “deal economics” as used in Claims 7, 17, and 30 are vague and indefinite. Applicants have amended paragraph 0023 of the specification by more clearly defining the term “deal” as used in the present patent application. No new matter has been added. Accordingly, Applicants respectfully request that the rejection of Claims 7, 17, and 30 under Section 112, second paragraph, be withdrawn.

The Office Action also indicates that the term “workload driver” as used in Claims 1, 6-21, 23, 37-39, 54, and 56 is vague and confusing. Applicants have amended Claims 1, 7, 17, 37, and 54 by adding a recitation describing a workload driver. Claims 6, 8-21, 23, 38-39, and 56 depend from Claims 1, 7, 17, 37, 54. Accordingly, Applicants respectfully request that the rejection of Claims 1, 6-21, 23, 37-39, 54, and 56 under Section 112, second paragraph, be withdrawn.

The Office Action further indicates that the terms “strong”, “moderate”, and “weak” as used in Claims 9 and 13 are vague and indefinite. Applicants have amended Claims 9 and 13. Accordingly, Applicants respectfully request that the rejection of Claims 9 and 13 under Section 112, second paragraph, be withdrawn.

For the reasons set forth above, Applicants respectfully request that the rejection of Claims 1, 6-21, 23, 30, 37-39, 54, and 56 under Section 112, second paragraph, be withdrawn.

The rejection of Claims 1-5, 7, 17, 28-30, 34-37, 45-47, and 51-57 under 35 U.S.C. § 103(a) as being unpatentable over Dembo (U.S. Patent No. 5,799,287) in view of Chaudhuri et al. (U.S. Patent No. 5,913,207) (“Chaudhuri”) is respectfully traversed.

Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio. A user defines a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. A representation of the trade-off between risk and expected profit for some arbitrary replicating portfolio is then determined and used to

calculate a maximum risk-adjusted profit. The method then uses the predefined set of available market instruments to identify a set of transactions that will create a replicating portfolio that will achieve the maximum risk-adjusted profit. The method and apparatus also derives the information required to compute a risk premium for pricing of portfolios in incomplete markets, and performs the computation.

Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. The queries are defined by a query language supported by the database system. The index selection tool attempts to reduce the number of indexes to be considered, the number of index configurations to be enumerated, and the number of invocations of a query optimizer in selecting an index configuration for the workload.

Claim 1 recites a method for operating a computer to facilitate use of a pricing model for evaluating a deal that includes a portfolio of loans, wherein the method includes “prompting a user to enter at least one workload driver for the deal, each workload driver is an element of the deal that is to be reviewed as part of the deal evaluation...prompting the user to enter a trigger level for each entered workload driver, the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver...prompting the user to enter a weight for each trigger level...and allocating portfolio and underwriting expenses, based upon workload drivers and the corresponding trigger levels.”

Neither Dembo nor Chaudhuri, considered alone or in combination, describe or suggest a method for evaluating a deal that includes a portfolio of loans, wherein the method includes prompting a user to enter at least one workload driver for the deal wherein each workload driver is an element of the deal that is to be reviewed as part of the deal evaluation, prompting the user to enter a trigger level for each entered workload driver wherein the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver, prompting the user to enter a weight for each trigger level, and allocating portfolio and underwriting expenses, based upon workload drivers and the corresponding trigger levels.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Dembo in view of Chaudhuri.

Claims 2-5 depend, directly or indirectly, from independent Claim 1 which is submitted to be patentable. When the recitations of Claims 2-5 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-5 are also patentable over Dembo in view of Chaudhuri.

Claim 7 recites a database that includes “data corresponding to workload drivers for a deal, each workload driver is an element of the deal that is to be reviewed as part of a deal evaluation...data corresponding to a trigger level for each workload driver, the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver...and data corresponding to input and feedback regarding the deal.”

Neither Dembo nor Chaudhuri, considered alone or in combination, describe or suggest a database that includes data corresponding to workload drivers for a deal wherein each workload driver is an element of the deal that is to be reviewed as part of a deal evaluation, data corresponding to a trigger level for each workload driver wherein the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver, and data corresponding to input and feedback regarding the deal.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri

describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Accordingly, Applicants respectfully submit that Claim 7 is patentable over Dembo in view of Chaudhuri.

Claim 17 recites a system for evaluating deal economics based on workload requirements that includes “a database comprising data corresponding to workload drivers and related trigger levels for each deal, each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation, the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the related workload driver...and a server configured to prompt users to select trigger levels for each designated workload driver when entering deal data.”

Neither Dembo nor Chaudhuri, considered alone or in combination, describe or suggest a system for evaluating deal economics based on workload requirements that includes a database having data corresponding to workload drivers and related trigger levels for each deal wherein each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation and the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the related workload driver, and a server configured to prompt users to select trigger levels for each designated workload driver when entering deal data.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Accordingly, Applicants respectfully submit that Claim 17 is patentable over Dembo in view of Chaudhuri.

Claim 28 recites a method for assessing profitability of a portfolio of accounts over the life of the accounts using an activity based pricing model, wherein the method includes “generating at least one of a customer risk rating and a workload rating...allocating at least one

of a customer risk expense, a workload expense, an underwriting expense and a reserve amount...and analyzing quality of the portfolio.”

Neither Dembo nor Chaudhuri, considered alone or in combination, describe or suggest a method for assessing profitability of a portfolio of accounts over the life of the accounts using an activity based pricing model, wherein the method includes generating at least one of a customer risk rating and a workload rating, allocating at least one of a customer risk expense, a workload expense, an underwriting expense and a reserve amount, and analyzing quality of the portfolio.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Accordingly, Applicants respectfully submit that Claim 28 is patentable over Dembo in view of Chaudhuri.

Claims 29-30, and 34-36 depend, directly or indirectly, from independent Claim 28 which is submitted to be patentable. When the recitations of Claims 29-30, and 34-36 are considered in combination with the recitations of Claim 28, Applicants submit that dependent Claims 29-30, and 34-36 are also patentable over Dembo in view of Chaudhuri.

Claim 37 recites a computer-readable medium for evaluating a loan portfolio that includes “a record of workload drivers for a loan portfolio, each workload driver is an element of the loan portfolio that is to be reviewed as part of the portfolio evaluation...a record of trigger levels for each workload driver, each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver...and a plurality of rules for matching workload drivers and trigger levels to one or more loan portfolios.”

Neither Dembo nor Chaudhuri, considered alone or in combination, describe or suggest a computer-readable medium for evaluating a loan portfolio that includes a record of workload drivers for a loan portfolio wherein each workload driver is an element of the loan portfolio that

is to be reviewed as part of the portfolio evaluation, a record of trigger levels for each workload driver wherein each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver, and a plurality of rules for matching workload drivers and trigger levels to one or more loan portfolios.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Accordingly, Applicants respectfully submit that Claim 37 is patentable over Dembo in view of Chaudhuri.

Claim 45 recites an apparatus that includes “means for prompting a user to enter at least one of a customer risk rating and a workload rating...means for allocating at least one of a customer risk expense, a workload expense, an underwriting expense and a reserve amount...and means for analyzing quality of the portfolio.”

Neither Dembo nor Chaudhuri, considered alone or in combination, describe nor suggest an apparatus that includes means for prompting a user to enter at least one of a customer risk rating and a workload rating, means for allocating at least one of a customer risk expense, a workload expense, an underwriting expense and a reserve amount, and means for analyzing quality of the portfolio.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the

database. Accordingly, Applicants respectfully submit that Claim 45 is patentable over Dembo in view of Chaudhuri.

Claims 46-47, and 51-53 depend, directly or indirectly, from independent Claim 45 which is submitted to be patentable. When the recitations of Claims 46-47, and 51-53 are considered in combination with the recitations of Claim 45, Applicants submit that dependent Claims 46-47, and 51-53 are also patentable over Dembo in view of Chaudhuri.

Claim 54 recites a method for determining workloads for a portfolio of deals that includes “selecting, from an electronic interface, a number of workload drivers for the portfolio, each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation...selecting, from the electronic interface, trigger levels for each of the workload drivers, each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver...and requesting, from the electronic interface, a workload rating for the portfolio.”

Neither Dembo nor Chaudhuri, considered alone or in combination, describe or suggest a method for determining workloads for a portfolio of deals that includes selecting from an electronic interface a number of workload drivers for the portfolio wherein each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation, selecting from the electronic interface trigger levels for each of the workload drivers wherein each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver, and requesting from the electronic interface a workload rating for the portfolio.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the

database. Accordingly, Applicants respectfully submit that Claim 54 is patentable over Dembo in view of Chaudhuri.

Claims 55-57 depend, directly or indirectly, from independent Claim 54 which is submitted to be patentable. When the recitations of Claims 55-57 are considered in combination with the recitations of Claim 54, Applicants submit that dependent Claims 55-57 are also patentable over Dembo in view of Chaudhuri.

Notwithstanding the above, the rejection of Claims 1-5, 7, 17, 28-30, 34-37, 45-47, and 51-57 under 35 U.S.C. § 103(a) as being unpatentable over Dembo in view of Chaudhuri is further traversed on the grounds that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Dembo using the teachings of Chaudhuri. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Dembo nor Chaudhuri describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Dembo with Chaudhuri because there is no motivation to combine the references suggested in the art. Rather, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Only the conclusory statement that “[i]t would have been obvious to one with ordinary skill in the art to include allocating expenses based upon workload drivers and their trigger levels to Dembo because Chaudhuri teaches workload database considerations used to optimize database performance” suggests combining the disclosures.

More specifically, neither Dembo nor Chaudhuri describe or suggest the claimed invention. Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Combining Dembo with the teachings of Chaudhuri would not describe or suggest the present invention. Accordingly,

Applicants respectfully submit that there is no suggestion or motivation to combine Dembo with Chaudhuri.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levingood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Dembo is cited for its teaching of facilitating use of a pricing model utilizing future values and ranges, and Chaudhuri is cited for teaching allocating workload drivers and trigger levels for a database. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants respectfully request that the Section 103 rejection be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-5, 7, 17, 28-30, 34-37, 45-47, and 51-57 be withdrawn.

The rejection of Claims 6, 8-16, 18-27, 29-36, and 38-44 under 35 U.S.C. § 103(a) as being unpatentable over Dembo in view of Chaudhuri and further in view of Freeman et al. (U.S. Patent No. 6,249,775) ("Freeman") is respectfully traversed.

Dembo and Chaudhuri are described above. Freeman describes a method for mortgage and closed end loan portfolio management in the form of an analytic tool designed to improve analysis of past and future performance of loan portfolios. The method includes aggregating loan units into loan vintages wherein the loans in each vintage originate within a predetermined time interval of one another, comparing different vintages to one another in a manner such that the ages of the loans in the different vintages are comparable to one another, predicting delinquency rates expected for a portfolio of loans during a forward looking time window, and predicting the default rate of the loan portfolios at a selected future point in time. The results of the analysis are graphically depicted and/or automatically fed back to provide "yes" or "no" decisions regarding investments in various loan portfolios.

Claim 6 depends from independent Claim 1. Claim 1 recites a method for operating a computer to facilitate use of a pricing model for evaluating a deal that includes a portfolio of loans, wherein the method includes "prompting a user to enter at least one workload driver for the deal, each workload driver is an element of the deal that is to be reviewed as part of the deal evaluation...prompting the user to enter a trigger level for each entered workload driver, the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver...prompting the user to enter a weight for each trigger level...and allocating portfolio and underwriting expenses, based upon workload drivers and the corresponding trigger levels."

None of Dembo, Chaudhuri, or Freeman, considered alone or in combination, describe or suggest a method for evaluating a deal that includes a portfolio of loans, wherein the method includes prompting a user to enter at least one workload driver for the deal wherein each workload driver is an element of the deal that is to be reviewed as part of the deal evaluation, prompting the user to enter a trigger level for each entered workload driver wherein the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver, prompting the user to enter a weight for each trigger level, and

allocating portfolio and underwriting expenses, based upon workload drivers and the corresponding trigger levels.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Freeman describes a method for mortgage and closed end loan portfolio management that uses an analytic tool designed to improve analysis of past and future performance of loan portfolios. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Dembo in view of Chaudhuri and further in view of Freeman.

When the recitations of Claim 6 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claim 6 is also patentable over Dembo in view of Chaudhuri and further in view of Freeman.

Claims 8-16 depend from independent Claim 7. Claim 7 recites a database that includes “data corresponding to workload drivers for a deal, each workload driver is an element of the deal that is to be reviewed as part of a deal evaluation...data corresponding to a trigger level for each workload driver, the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver...and data corresponding to input and feedback regarding the deal.”

None of Dembo, Chaudhuri, or Freeman, considered alone or in combination, describe or suggest a database that includes data corresponding to workload drivers for a deal wherein each workload driver is an element of the deal that is to be reviewed as part of a deal evaluation, data corresponding to a trigger level for each workload driver wherein the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver, and data corresponding to input and feedback regarding the deal.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Freeman describes a method for mortgage and closed end loan portfolio management that uses an analytic tool designed to improve analysis of past and future performance of loan portfolios. Accordingly, Applicants respectfully submit that Claim 7 is patentable over Dembo in view of Chaudhuri and further in view of Freeman.

When the recitations of Claims 8-16 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claims 8-16 are also patentable over Dembo in view of Chaudhuri and further in view of Freeman.

Claims 18-27 depend from independent Claim 17. Claim 17 recites a system for evaluating deal economics based on workload requirements that includes “a database comprising data corresponding to workload drivers and related trigger levels for each deal, each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation, the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the related workload driver...and a server configured to prompt users to select trigger levels for each designated workload driver when entering deal data.”

None of Dembo, Chaudhuri, or Freeman, considered alone or in combination, describe or suggest a system for evaluating deal economics based on workload requirements that includes a database having data corresponding to workload drivers and related trigger levels for each deal wherein each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation and the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the related workload driver, and a server configured to prompt users to select trigger levels for each designated workload driver when entering deal data.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Freeman describes a method for mortgage and closed end loan portfolio management that uses an analytic tool designed to improve analysis of past and future performance of loan portfolios. Accordingly, Applicants respectfully submit that Claim 17 is patentable over Dembo in view of Chaudhuri and further in view of Freeman.

When the recitations of Claims 18-27 are considered in combination with the recitations of Claim 17, Applicants submit that dependent Claims 18-27 are also patentable over Dembo in view of Chaudhuri and further in view of Freeman.

Claims 29-36 depend from independent Claim 28. Claim 28 recites a method for assessing profitability of a portfolio of accounts over the life of the accounts using an activity based pricing model, wherein the method includes “generating at least one of a customer risk rating and a workload rating...allocating at least one of a customer risk expense, a workload expense, an underwriting expense and a reserve amount...and analyzing quality of the portfolio.”

None of Dembo, Chaudhuri, or Freeman, considered alone or in combination, describe or suggest a method for assessing profitability of a portfolio of accounts over the life of the accounts using an activity based pricing model, wherein the method includes generating at least one of a customer risk rating and a workload rating, allocating at least one of a customer risk expense, a workload expense, an underwriting expense and a reserve amount, and analyzing quality of the portfolio.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri

describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Freeman describes a method for mortgage and closed end loan portfolio management that uses an analytic tool designed to improve analysis of past and future performance of loan portfolios. Accordingly, Applicants respectfully submit that Claim 28 is patentable over Dembo in view of Chaudhuri and further in view of Freeman.

When the recitations of Claims 29-36 are considered in combination with the recitations of Claim 28, Applicants submit that dependent Claims 29-36 are also patentable over Dembo in view of Chaudhuri and further in view of Freeman.

Claims 38-44 depend from independent Claim 37. Claim 37 recites a computer-readable medium for evaluating a loan portfolio that includes “a record of workload drivers for a loan portfolio, each workload driver is an element of the loan portfolio that is to be reviewed as part of the portfolio evaluation...a record of trigger levels for each workload driver, each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver...and a plurality of rules for matching workload drivers and trigger levels to one or more loan portfolios.”

None of Dembo, Chaudhuri, or Freeman, considered alone or in combination, describe or suggest a computer-readable medium for evaluating a loan portfolio that includes a record of workload drivers for a loan portfolio wherein each workload driver is an element of the loan portfolio that is to be reviewed as part of the portfolio evaluation, a record of trigger levels for each workload driver wherein each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver, and a plurality of rules for matching workload drivers and trigger levels to one or more loan portfolios.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use

by a database server in accessing a database to execute a workload of queries against the database. Freeman describes a method for mortgage and closed end loan portfolio management that uses an analytic tool designed to improve analysis of past and future performance of loan portfolios. Accordingly, Applicants respectfully submit that Claim 37 is patentable over Dembo in view of Chaudhuri and further in view of Freeman.

When the recitations of Claims 38-44 are considered in combination with the recitations of Claim 37, Applicants submit that dependent Claims 38-44 are also patentable over Dembo in view of Chaudhuri and further in view of Freeman.

Notwithstanding the above, the rejection of Claims 6, 8-16, 18-27, 29-36, and 38-44 under 35 U.S.C. § 103(a) as being unpatentable over Dembo in view of Chaudhuri and further in view of Freeman is further traversed on the grounds that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Dembo using the teachings of Chaudhuri and Freeman. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Dembo, Chaudhuri or Freeman describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Dembo with Chaudhuri and Freeman because there is no motivation to combine the references suggested in the art. Rather, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Only the conclusory statement that “[i]t would have been obvious to one with ordinary skill in the art to include loan data and loan portfolios to Dembo in view of Chaudhuri because Freeman teaches the importance of loan portfolio management” suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levingood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such

references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Dembo is cited for its teaching of facilitating use of a pricing model utilizing future values and ranges, Chaudhuri is cited for teaching allocating workload drivers and trigger levels for a database, and Freeman is cited for its teaching of financial data including loan data. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants respectfully request that the Section 103 rejection be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 6, 8-16, 18-27, 29-36, and 38-44 be withdrawn.

The rejection of Claims 31-33, 48-50, and 58 under 35 U.S.C. § 103(a) as being unpatentable over Dembo in view of Chaudhuri and further in view of Anand et al. ("Anand") is respectfully traversed.

Applicants note that the Office Action does not appear to specifically state which Anand patent is being used in this rejection. Applicants provided the Patent Office with three Anand patents (U.S. Patent Nos. 5,710,900; 5,721,903; and 5,692,181) as part of Applicants'

Information Disclosure Statement. Since all three Anand patents appear to be similar to each other, Applicants have used the first issued Anand patent (Patent No. 5,692,181) in addressing this rejection.

Dembo and Chaudhuri are described above. Anand (U.S. Patent No. 5,692,181) describes a system and method for generating a report for a user which allows the user to make decisions, without requiring the user to understand or interpret data itself. The method includes the steps of organizing data within a database into columns of tables, providing a computer coupled to the database that executes an application program that generates the report, recording a business concept by the application program, recording an attribute associated with the business concept by the application program, displaying a list of the columns of tables in the database by the computer, recording a mapping of the attribute to one of the columns in the list, displaying a list of business indicators by the computer, recording a mapping of one of the business indicators to the column, joining the attribute table with the business indicator table so that the application program can use the additional table to create the report.

Claims 31-33 depend from independent Claim 28. Claim 28 recites a method for assessing profitability of a portfolio of accounts over the life of the accounts using an activity based pricing model, wherein the method includes “generating at least one of a customer risk rating and a workload rating...allocating at least one of a customer risk expense, a workload expense, an underwriting expense and a reserve amount...and analyzing quality of the portfolio.”

None of Dembo, Chaudhuri, or Anand, considered alone or in combination, describe or suggest a method for assessing profitability of a portfolio of accounts over the life of the accounts using an activity based pricing model, wherein the method includes generating at least one of a customer risk rating and a workload rating, allocating at least one of a customer risk expense, a workload expense, an underwriting expense and a reserve amount, and analyzing quality of the portfolio.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be

created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Anand describes a system and method for generating a report for a user which allows the user to make decisions, without requiring the user to understand or interpret data itself. Accordingly, Applicants respectfully submit that Claim 28 is patentable over Dembo in view of Chaudhuri and further in view of Anand.

When the recitations of Claims 31-33 are considered in combination with the recitations of Claim 28, Applicants submit that dependent Claims 31-33 are also patentable over Dembo in view of Chaudhuri and further in view of Anand.

Claims 48-50 depend from independent Claim 45. Claim 45 recites an apparatus that includes “means for prompting a user to enter at least one of a customer risk rating and a workload rating...means for allocating at least one of a customer risk expense, a workload expense, an underwriting expense and a reserve amount...and means for analyzing quality of the portfolio.”

None of Dembo, Chaudhuri, or Anand, considered alone or in combination, describe or suggest an apparatus that includes means for prompting a user to enter at least one of a customer risk rating and a workload rating, means for allocating at least one of a customer risk expense, a workload expense, an underwriting expense and a reserve amount, and means for analyzing quality of the portfolio.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Anand describes a system and method for generating a report for a user which allows the user to make decisions, without requiring the user to understand or interpret data itself.

Accordingly, Applicants respectfully submit that Claim 45 is patentable over Dembo in view of Chaudhuri and further in view of Anand.

When the recitations of Claims 48-50 are considered in combination with the recitations of Claim 45, Applicants submit that dependent Claims 48-50 are also patentable over Dembo in view of Chaudhuri and further in view of Anand.

Claim 58 depends from independent Claim 54. Claim 54 recites a method for determining workloads for a portfolio of deals that includes “selecting, from an electronic interface, a number of workload drivers for the portfolio, each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation...selecting, from the electronic interface, trigger levels for each of the workload drivers, each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver...and requesting, from the electronic interface, a workload rating for the portfolio.”

None of Dembo, Chaudhuri, or Anand, considered alone or in combination, describe or suggest a method for determining workloads for a portfolio of deals that includes selecting from an electronic interface a number of workload drivers for the portfolio wherein each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation, selecting from the electronic interface trigger levels for each of the workload drivers wherein each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver, and requesting, from the electronic interface, a workload rating for the portfolio.

Rather, Dembo describes a method and apparatus for determining an optimal replicating portfolio for a given target portfolio that includes prompting a user to define a target portfolio to be replicated, a set of available market instruments from which the replicating portfolio may be created, a set of future scenarios, a horizon date, and a minimum profit to be attained. Chaudhuri describes a method and a tool for selecting an index configuration from a set of indexes for use by a database server in accessing a database to execute a workload of queries against the database. Anand describes a system and method for generating a report for a user which allows the user to make decisions, without requiring the user to understand or interpret data itself.

Accordingly, Applicants respectfully submit that Claim 54 is patentable over Dembo in view of Chaudhuri and further in view of Anand.

When the recitations of Claim 58 are considered in combination with the recitations of Claim 54, Applicants submit that dependent Claim 58 is also patentable over Dembo in view of Chaudhuri and further in view of Anand.

Notwithstanding the above, the rejection of Claims 31-33, 48-50, and 58 under 35 U.S.C. § 103(a) as being unpatentable over Dembo in view of Chaudhuri and further in view of Anand is further traversed on the grounds that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Dembo using the teachings of Chaudhuri and Anand. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Dembo, Chaudhuri or Anand describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Dembo with Chaudhuri and Anand because there is no motivation to combine the references suggested in the art. Rather, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching.

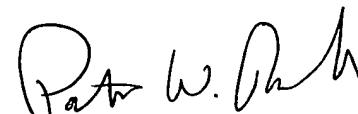
Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Dembo is cited for its teaching of facilitating use of a pricing model utilizing future values and ranges, Chaudhuri is cited for teaching allocating workload

drivers and trigger levels for a database, and Anand is cited for its teaching of report generation. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants respectfully request that the Section 103 rejection be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 31-33, 48-50, and 58 be withdrawn.

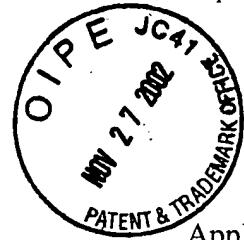
In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Casciano et al. :  
Serial No.: 09/681,408 : Art Unit: 3624  
Filed: March 30, 2001 : Examiner: Alain L. Bashore  
For: METHODS AND SYSTEMS :  
FOR IMPLEMENTING A :  
PROFITABILITY MODEL :

## SUBMISSION OF MARKED UP PARAGRAPHS AND CLAIMS

Hon. Commissioner for Patents  
Washington, D.C. 20231

Submitted herewith are marked up Paragraphs and Claims in accordance with 37 C.F.R.  
1.121(b)(1)(ii) and 1.121(c)(1)(ii).

IN THE SPECIFICATION

Please replace paragraph 0023 with the following replacement paragraph:

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DEC 03 2002  
GROUP 3600

Set forth below is a description of exemplary methods and systems for facilitating an assessment of profitability of accounts over the life of the accounts. While the methods and systems are sometimes described in the context of loans and loan portfolios, the methods and systems are not limited to practice in connection with only loans and loan portfolios. The methods and systems can be used, for example, in connection with leases, financing and many other different types of financial activity. As used herein, the term "deal" is defined as any transaction that involves at least two parties. A deal therefore may involve at least one of loans, loan portfolios, leases, financing, and any other financial activity.

IN THE CLAIMS:

1. (once amended) A method for operating a computer to facilitate use of a pricing model for evaluating a deal that includes a portfolio of loans, said method comprising the steps of:

prompting a user to enter at least one workload driver for [a portfolio] the deal, each workload driver is an element of the deal that is to be reviewed as part of the deal evaluation;

prompting the user to enter a trigger level for each entered workload driver, the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver;

prompting the user to enter a weight for each trigger level; and

allocating portfolio and underwriting expenses, based upon workload drivers and [their] the corresponding trigger levels.

7. (once amended) A database comprising:

data corresponding to workload drivers for a deal, each workload driver is an element of the deal that is to be reviewed as part of a deal evaluation;

data corresponding to a trigger level for each workload driver, the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver; and

data corresponding to input and feedback regarding the deal.

8. (once amended) A database according to Claim 7 wherein said data corresponding to workload drivers comprise data relating to an entity involved in the deal that includes [corresponding to] at least one of collateral performance, excess availability, books and records, risk classification, number of agings, frequency of borrowing, frequency of reporting, co-borrower structure, fixed charge coverage, first time asset based lending borrower and export-import bank guarantee.

9. (once amended) A database according to Claim 8 wherein the trigger levels for the workload drivers collateral performance and books and records comprise at least one of a [strong] first trigger level, a [moderate] second trigger level, and a [weak] third trigger level, the first trigger level indicates less of an anticipated level of effort for review as compared to the

second trigger level, the second trigger level indicates less of an anticipated level of effort for review as compared to the third trigger level.

13. (once amended) A database according to Claim 8 wherein the trigger levels for the workload driver risk classification comprise at least one of a performing trigger level, [a moderate] an intermediate trigger level, and a watch trigger level, the performing trigger level indicates less of an anticipated level of effort for review as compared to the intermediate trigger level, the intermediate trigger level indicates less of an anticipated level of effort for review as compared to the watch trigger level.

17. (once amended) A system for evaluating deal economics based on workload requirements, said system comprising:

a database comprising data corresponding to workload drivers and related trigger levels for each deal, each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation, the trigger level assigned to a workload driver indicates the anticipated level of effort required to review the related workload driver; and

a server configured to prompt users to select trigger levels for each designated workload driver when entering deal data.

37. (once amended) A computer-readable medium for evaluating a loan portfolio, comprising:

a record of workload drivers for a loan portfolio, each workload driver is an element of the loan portfolio that is to be reviewed as part of the portfolio evaluation;

a record of trigger levels for each workload driver, each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver; and

a plurality of rules for matching workload drivers and trigger levels to one or more loan portfolios.

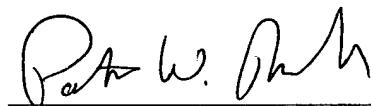
54. (once amended) A method for determining workloads for a portfolio of deals, said method comprising the steps of:

selecting, from an electronic interface, a number of workload drivers for the portfolio, each workload driver is an element of a deal that is to be reviewed as part of a deal evaluation;

selecting, from the electronic interface, trigger levels for each of the workload drivers, each trigger level assigned to a workload driver indicates the anticipated level of effort required to review the corresponding workload driver; and

requesting, from the electronic interface, a workload rating for the portfolio.

Respectfully Submitted,



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